

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A computer-implemented method comprising:
receiving data defining a document having a plurality of logical pages that is to be printed on a printer;
processing the data to identify one or more characteristics of the data indicative of visual discernability to the human eye of at least one feature of the data; and
based on the one or more characteristics, automatically selecting a number of logical pages per print medium page for an N-Up printing mode in which to print the document.
2. (Original) The computer-implemented method of claim 1, wherein the act of processing the data comprises processing data associated with text.
3. (Original) The computer-implemented method of claim 1, wherein the act of processing the data comprises processing data associated with graphics.
4. (Canceled)
5. (Original) The computer-implemented method of claim 1, wherein the act of selecting comprises performing a mapping operation, based on the one or more characteristics, effective to map the one or more characteristics to an N-Up mode.
6. (Original) The computer-implemented method of claim 5, wherein the act of performing comprises consulting a look up table containing a plurality of characteristic values

and N-Up mode values each of which being associated with one or more characteristic values.

7. (Currently amended) The computer-implemented method of claim 1 further comprising changing a predetermined relationship between the one or more characteristics and the number of logical pages per print medium page ~~with which an N-Up printing mode is associated effective~~ such that future documents that embody the ~~changed one or more~~ characteristics will be printed ~~in the associated N-Up mode~~ according to the changed relationship.

8. (Original) The computer-implemented method of claim 7, wherein the act of changing is performed responsive to user input.

9. (Currently amended) One or more computer-readable media having computer-readable instructions thereon which, when executed by one or more processors, cause the one or more processors to:

receive data defining a document having a plurality of logical pages that is to be printed on a printer;

process the data to identify one or more characteristics of the data indicative of visual discernability to the human eye of at least one feature of the data; and

based on the one or more characteristics, automatically select a number of logical pages per print medium page for an N-Up printing mode in which to print the document.

10. (Original) The one or more computer-readable media of claim 9, wherein the instructions cause the one or more processors to process data associated with text.

11. (Original) The one or more computer-readable media of claim 9, wherein the instructions cause the one or more processors to process data associated with graphics.

12. (Canceled)

13. (Original) The one or more computer-readable media of claim 9, wherein the instructions cause the one or more processors to select an N-Up printing mode by performing a mapping operation, based on the one or more characteristics, effective to map the one or more characteristics to an N-Up mode.

14. (Original) The one or more computer-readable media of claim 13, wherein the instructions cause the one or more processors to perform the mapping operation by consulting a look up table containing a plurality of characteristic values and N-Up mode values each of which being associated with one or more characteristic values.

15. (Currently amended) The one or more computer-readable media of claim 9, wherein the instructions further cause the one or more processors to change a predetermined relationship between the one or more characteristics and the number of logical pages per print medium page with which an N-Up printing mode is associated effective such that future documents that embody the changed one or more characteristics will be printed in the associated N-Up mode according to the changed relationship.

16. (Currently amended) The one or more computer-readable media of claim 15, wherein the instructions cause the one or more processors to change ~~one or more characteristics~~ the predetermined relationship responsive to user input.

17. (Currently amended) A computer-implemented method comprising:
receiving data defining a document having a plurality of logical pages that is to be printed on a printer;
processing the data to identify one or more characteristics of the data, at least one of the

characteristics pertaining to a font that is to appear on a printed document; and

based on the one or more characteristics, selecting a number of logical pages per print medium page for an N-Up printing mode in which to print the document such that the font is readable by the human eye.

18. (Original) The computer-implemented method of claim 17, wherein said at least one characteristic pertaining to the font pertains to a font size.

19. (Original) The computer-implemented method of claim 17, wherein said at least one characteristic pertaining to the font pertains to a smallest font size that would appear on the printed document.

20. (Original) The computer-implemented method of claim 17, wherein said at least one characteristic pertaining to the font pertains to a font type.

21. (Original) The computer-implemented method of claim 17, wherein said at least one characteristic pertaining to the font pertains to a font complexity.

22. (Original) The computer-implemented method of claim 17, wherein said at least one characteristic pertaining to the font pertains to at least one graphics-based font.

23. (Original) The computer-implemented method of claim 17, wherein said act of processing the data comprises processing data associated with graphics.

24. (Original) The computer-implemented method of claim 17, wherein said act of receiving data comprises receiving page description language (PDL) data.

25. (Original) The computer-implemented method of claim 17, wherein said act of receiving data comprises receiving bit map data.

26. (Currently amended) One or more computer-readable media having computer-readable instructions thereon which, when executed by one or more processors, cause the one or more processors to:

receive data defining a document having a plurality of logical pages that is to be printed on a printer;

process the data to identify one or more characteristics of the data, at least one of the characteristics pertaining to a font that is to appear on a printed document; and

based on the one or more characteristics, select a number of logical pages per print medium page for an N-Up printing mode in which to print the document such that the font is readable by the human eye.

27. (Original) The one or more computer-readable media of claim 26, wherein the instructions cause the one or more processors to process the data to identify at least one characteristic pertaining to a font size.

28. (Original) The one or more computer-readable media of claim 26, wherein the instructions cause the one or more processors to process the data to identify at least one characteristic pertaining to a smallest font size that would appear on the printed document.

29. (Original) The one or more computer-readable media of claim 26, wherein the instructions cause the one or more processors to process the data to identify at least one characteristic pertaining to a font type.

30. (Original) The one or more computer-readable media of claim 26, wherein the

instructions cause the one or more processors to process the data to identify at least one characteristic pertaining to a font complexity.

31. (Original) The one or more computer-readable media of claim 26, wherein the instructions cause the one or more processors to process the data to identify at least one characteristic pertaining to at least one graphics-based font.

32. (Original) The one or more computer-readable media of claim 26, wherein the instructions cause the one or more processors to process the data associated with graphics.

33. (Original) The one or more computer-readable media of claim 26, wherein the instructions cause the one or more processors to receive and process page description language (PDL) data.

34. (Original) The one or more computer-readable media of claim 26, wherein the instructions cause the one or more processors to receive and process bit map data.

35. (Currently amended) An apparatus comprising:
memory;
one or more processors;
computer-readable instructions in the memory which, when executed by the one or more processors, cause the processors to:
 receive data defining a document having a plurality of logical pages that is to be printed on a printer;
 process the data to identify one or more characteristics of the data indicative of visual discernability to the human eye of at least one feature of the data;
 based on the one or more characteristics, select a number of logical pages per print

medium page for an N-Up printing mode in which to print the document.

36. (Original) The apparatus of claim 35, wherein the data that is processed is associated with text.

37. (Original) The apparatus of claim 35, wherein the data that is processed is associated with graphics.

38. (Original) The apparatus of claim 35, wherein the data that is processed is associated with both text and graphics.

39. (Original) The apparatus of claim 35, wherein the N-Up printing mode is selected by performing a mapping operation, based on the one or more characteristics, effect to map the one or more characteristics to an N-Up mode.

40. (Original) The apparatus of claim 35 embodied as a printer.

41. (Original) The apparatus of claim 35 embodied as a client computing device.

42. (Original) The apparatus of claim 35 embodied as a server.

43. (Currently amended) A ~~software architecture~~printing system comprising:
an N-Up analysis module configured to:

receive data defining a document having a plurality of logical pages that is to be printed on a printer;

process the data to identify one or more characteristics of the data indicative of visual discernability to the human eye of at least one feature of the data; and

based on the one or more characteristics, select a number of logical pages per print medium page for an N-Up printing mode in which to print the document, the module comprising:
a text analyzer configured to process data associated with text, and
a graphics analyzer configured to process data associated with graphics;

and

a printing mechanism configured to print the processed data.

44. (Currently amended) The ~~software architecture~~printing system of claim 43 further comprising a look up table containing a plurality of characteristic values and N-Up mode values each of which being associated with one or more characteristic values.

45. (Currently amended) The printing system ~~software architecture~~ of claim 44, wherein the module is configured to select an N-Up mode by mapping one or more characteristic values to an associated N-Up mode value.

46. (Currently amended) The printing system ~~software architecture~~ of claim 43, wherein the N-Up analysis module is embodied as a print driver.

47. (Currently amended) The printing system ~~software architecture~~ of claim 43, wherein the N-Up analysis module is embodied in a printer.

48. (Currently amended) The printing system ~~software architecture~~ of claim 43, wherein the N-Up analysis module is embodied in a client computer.

49. (Currently amended) The printing system ~~software architecture~~ of claim 43, wherein the N-Up analysis module is embodied in a server.

50. (New) The computer-implemented method of claim 1, wherein the selected number of logical pages per print medium page renders the at least one feature visually discernable to the human eye.

51. (New) The computer-implemented method of claim 50, wherein the at least one feature is text having a font size corresponding to a smallest font size in the document, and wherein the selected number of logical pages per print medium page renders the text readable by the human eye.

52. (New) The computer-implemented method of claim 50, wherein the at least one feature is a graphical feature, and wherein the selected number of logical pages per print medium page renders the graphical feature discernable by the human eye.